



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,516	01/27/2004	Raymond Aubin	71493-1210-aba	9954
7380	7590	05/13/2009		
SMART & BIGGAR P.O. BOX 2999, STATION D 900-55 METCALFE STREET OTTAWA, ON K1P 5Y6 CANADA			EXAMINER PASCAL, LESLIE C	
			ART UNIT 2613	PAPER NUMBER
			NOTIFICATION DATE 05/13/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jstlouis@smart-biggar.ca
aeyablonski@smart-biggar.ca
slryan@smart-biggar.ca

Office Action Summary	Application No. 10/764,516	Applicant(s) AUBIN ET AL.	
	Examiner Leslie Pascal	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2613

1. This application is now handled by a different examiner. All future correspondence should be addressed to Leslie Pascal.
2. The finality has been withdrawn. This has been done in view of new rejections which are required in addition to the following restriction requirement. The examiner regrets that these were not made earlier in the prosecution, but feels that they are necessary in order to provide a complete examination.
3. Although a restriction requirement is made in this action, in order to provide a more compact prosecution, the examiner is addressing issues that will be provided in the next Office action. The applicant is only given one month to respond to the present restriction requirement, and therefore, does not have to respond to the rejections in the restriction requirement. They are only provided so that the applicant can address them, if desired before the official action on the merits that will follow.
4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. Claims 1-15, 17-21, 24-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The process must be tied to another statutory class (such as a particular apparatus) or transform underlying subject matter (such as an article or materials) to a different state or thing.

The present claims 1, 8 are not tied to an apparatus that provides the method steps. For example, in claim 1 there are no means that provide the steps of generating a basic capacity (and performing analysis of claim 8). Further, it appears that this could be provided by a mental step. A network designer could determine basic packet capacity

Art Unit: 2613

based on packet network topology information and packet traffic information and determine basic optical capacity and a capacity value for each optical link based on the optical network topology information and the basic packet capacity. It would not be unreasonable for a network designer to figure out the capacity. In regard to claims 2-4, 9, 18 (in which this problem is corrected by claim 19, for claim 18), 20-21 and 25; it is unclear what the "inputs" that are formed are input into. What/where are the inputs formed for or supplied to? Although this is also a 112 second paragraph problem. It is considered here because it accentuates the problem of no apparatus to provide the method steps. In regard to claim 3, where are the inputs supplied? In regard to claims 5-7, 9-15 it is unclear what apparatus is tied to the method steps.

In regard to claims 1, 8, 17 and 24; the steps of the claim do not provide the result of the preamble. The steps of the claims do not provide a method for co-modeling a simulated packet network and a simulated optical network etc (generating capacity does not provide a method for co-modeling). In regard to claims 2, 9, 18 and 25, it is unclear how combining packet network topology information and the packet traffic information creates a simulated packet network or how combining the optical network topology information and the basic packet capacity form a simulated optical network. The steps of claim 3 and 19 do not provide a co-modeling.

Claims 1, 5-8, 17, 21-24 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. The claims do not provide a concrete result. It does not appear that the results would be repeatable. It is not clear that the generated basic packet capacity and the generated basic optical capacity would be repeatable because

Art Unit: 2613

it is not clear that the capacity would be a definite amount based on the claim language. For example, when determining the basic packet capacity based on packet network topology information and packet traffic information, different people would determine capacity at different amounts when determining based on such broad parameters as topology and packet traffic information. "Per packet (optical) engineering guidelines" of claims 5-7, 21-23 are vague and indefinite. There are many different packet engineering guidelines. It is unclear what the applicant means by this. This does not define a concrete criteria. There are different engineering guidelines considered by different people.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 1, 8, 17 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear that the generated basic packet capacity and the generated basic optical capacity would be repeatable because it is not clear that the capacity would be a definite amount based on the claim language. For example, when determining the basic packet capacity based on packet network topology information and packet traffic information, different people would determine capacity at different

Art Unit: 2613

amounts when determining based on such broad parameters as topology and packet traffic information.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2-7, 9, 18-23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

“Per packet (optical) engineering guidelines” of claims 5-7, 21-23 are vague and indefinite. There are many different packet engineering guidelines. It is unclear what the applicant means by this. In regard to claims 2-4, 9, 18 (corrected by 19), 20-21 and 25; it is unclear what the “inputs” that are formed are input into. What are the inputs formed for or supplied to?

Claims 4 and 20 provide for the use of co-modeling, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 4 and 20 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Art Unit: 2613

10. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 2-7, 9, 11, 18-23, 25, 27; drawn to a method of co-modeling a simulated packet network and a simulated optical network which uses the methods of figure 7 and 8, classified in class 398, subclass 66.
- II. Claims 10, 12-16, 26 and 28-32, drawn to a method of survivability of a simulated packet network and a simulated optical network which uses the methods of figures 9-11, classified in class 398, subclass 1.

11. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as it is can be used in a system that does not provide protection. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election

Art Unit: 2613

shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

12. Further, if the applicant selects group II. Group II has additional species requirements. This application contains claims directed to the following patentably distinct species

Species I) figure 9

Species II) figure 10

Species III) figure 11.

The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is no generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are

Art Unit: 2613

added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

13. Claims 1, 8, 17 and 24 link(s) invention I and invention II, species I. The restriction requirement between the linked inventions is **subject to** the nonallowance of the linking claim(s), claims 1, 8, 17 and 24. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions **shall** be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in

Art Unit: 2613

accordance with 37 CFR 1.104 **Claims that require all the limitations of an allowable linking claim** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

14. If the applicant elects group I, claims 1-9, 11, 17-25, 27 will be examined. If the applicant elects group II, one of the species will also HAVE to be elected. For example, the applicant would say, "I elect group II and further species I. The claims which read on the elected group and species are claims 1, 8, 10, 12-13, 17, 24, 26 and 28-29." If the applicant elects group II and species II, the claim which read on this election would be claims 14 and 30. " If the applicant elects group II and species III, the claim which read on this election would be claims 15-16 and 31-32.

15. The examiner will give a brief discussion in regard to the applicants' arguments to emphasize that problems with the claims with regard to 101 and 112 provide plausibility of the art rejections. The applicant argues that lovanna does not teach co-modeling. This issue is addressed by some of the 112, 101 rejections above. For

Art Unit: 2613

example, the method steps of claim 1 are in no way tied to co-modeling of the preamble. The steps do not give "life and breath" to the preamble and are in no way tied to the limitations in the preamble. The method steps of claim 1 do not provide co-modeling. Iovanna reads on the steps which are not tied to the preamble because the steps do not provide the method indicated in the preamble. In that a new rejection will be required in response to the restriction requirement, the art rejection may also be modified.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leslie Pascal/
Primary Examiner
Art Unit 2613